**Name**

**Date**

**Per.**

**Service Professional**

**Use your computers to research your choice of a service profession. In addition, research and answer the following questions with the highest caliber of work possible. Provide explanations where necessary!**

1. Choose a service job and find out what their starting annual salary will be.
2. Research how much student debt a person would have from any pre-service education
3. What need is there for this service job in the Federal Way/Kent communities?
4. Use the following representations to model the linear function of the relationship between the **amount of money in the bank,** if the annual salary is applied directly to loan payments, **and the number of years**.
5. Represent this relationship using a statement.
6. Represent this relationship using a table; label the variables as dependent or independent, describe what each means.

Dependent:

Independent:

1. Represent this relationship by graphing; be intentional about how you **label your axis’**, which axis is dependent v. independent and the scale that you choose to use.

*(Use Microsoft Mathematics to enter the equation of the function, save graph as an image, and insert here.*

1. Represent this relationship using an equation and use your equation to determine the exact amount of years it will take for this service professional to pay off all of their student loans (with no other financial obligations).
2. Calculate the rate of change (slope) for your equation and describe what it means in relation to paying student loans.
3. What are the domain and range for the function? Describe how the domain and range are restricted by the limitations of modeling the amount of money in the back to time in years.